

Title (en)

Electric heating apparatus, particularly for vehicle

Title (de)

Elektrische Heizeinrichtung, insbesondere für ein Kraftfahrzeug

Title (fr)

Appareil de chauffage électrique, en particulier pour véhicule

Publication

EP 0901311 A3 19990609 (DE)

Application

EP 98110528 A 19980609

Priority

DE 19738318 A 19970902

Abstract (en)

[origin: EP0901311A2] The heater arrangement includes several heating elements (14) put together to a heating block (12) which is held in a frame (18), and a control arrangement (28) for the control of the heating elements, which forms a structural unit with the heating block held in the frame. The control arrangement is preferably formed as a plug module and is directly connected over electric connections with the heating block.

IPC 1-7

H05B 3/12; **H05B 3/22**; **H05B 1/02**

IPC 8 full level

B60H 1/22 (2006.01); **H05B 3/14** (2006.01); **H05B 3/50** (2006.01)

CPC (source: EP)

B60H 1/2218 (2013.01); **B60H 1/2225** (2013.01); **F24H 3/0429** (2013.01); **F24H 9/1872** (2013.01); **H05B 3/14** (2013.01); **H05B 3/50** (2013.01); **H05B 2203/02** (2013.01)

Citation (search report)

- [AD] DE 4434613 A1 19960404 - BEHR GMBH & CO [DE]
- [A] EP 0840534 A1 19980506 - EGO ELEKTRO GERAETEBAU GMBH [DE]
- [A] US 4358664 A 19821109 - KRONSEDER HERMANN
- [A] EP 0725557 A1 19960807 - ATAG KEUKENTECHNIEK BV [NL]

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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0901311 A2 19990310; **EP 0901311 A3 19990609**; **EP 0901311 B1 20100526**; DE 19738318 A1 19990304; DE 19738318 B4 20070516; DE 19738318 C5 20141030; DE 59814100 D1 20071108; DE 59814453 D1 20100708; EP 1492384 A2 20041229; EP 1492384 A3 20051207; EP 1492384 B1 20070926; EP 1530405 A2 20050511; EP 1530405 A3 20070418; EP 1530405 B1 20180228; ES 2294402 T3 20080401; ES 2346725 T3 20101019

DOCDB simple family (application)

EP 98110528 A 19980609; DE 19738318 A 19970902; DE 59814100 T 19980609; DE 59814453 T 19980609; EP 04016205 A 19980609; EP 05003106 A 19980609; ES 04016205 T 19980609; ES 98110528 T 19980609